

UNCLASSIFIED

## CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET							DATE February 2004			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					NAVSTAR GPS BLI 2657				521R	
		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMP	TOTAL
QUANTITY										
COST (in millions)		\$11.4	\$15.5	\$11.7	\$13.2	\$12.5	\$12.8	\$13.0	Cont.	Cont.
<p>PROGRAM COVERAGE: Navigation Sensor System Interface (NAVSSI) is a surface based system that integrates shipboard navigation signals and distributes the processed output to user systems and networks. NAVSSI provides position, velocity, time and almanac data to onboard command and control systems in real time with Global Positioning System (GPS) as the primary source of navigation data. The navigation team uses an automated work station that includes automated planning functions and the use of Digital Nautical Charts (DNC). NAVSSI uses Non-Developmental Item (NDI) hardware and a combination of commercial off the shelf (COTS) and newly developed software. The GPS VME (Versa Module Europa) Receiver Card (GVRC) replaces the 13 card GPS receiver with a single card and is hosted within NAVSSI. A subset of the NAVSSI program is NAVSSI Lite, which provides electronic charting capability to vessels not requiring the full NAVSSI system.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Procurement and installation of Navigation Sensor System Interface (NAVSSI) are required to provide Global Positioning System (GPS) and other navigation sensor data to ship-board C4ISR, Combat, and Weapons Systems. NAVSSI enables utilization and display of electronic chart products. NAVSSI is the only available system that performs the full functions of collection, integration, and distribution of navigation data. Common charting and precision navigation data are required to allow a common and correlated ship-to-ship tactical and operational picture. NAVSSI ensures precise Strike and Theater Ballistic Missile Defense (TBMD) weapon systems to have the necessary navigational data. Failure to procure and install NAVSSI would result in loss of critical navigation data required by Combat and Weapons Systems.</p> <p>FY 04 funding procures 9 NAVSSI systems and 9 RTS/DCS retrofit kits and installation of 9 NAVSSI systems and 8 RTS/DCS retrofits. FY 05 funding procures 5 NAVSSI systems and 3 RTS/DCS retrofit kits and installation of 6 NAVSSI systems, and 4 RTS/DCS retrofits.</p> <p>Installations are being done for each class/ship through the preparation of ship alteration proposals and ship alteration records. Installation Agent: Installation teams and/or overhaul - to be determined for each ship during execution.</p>										

UNCLASSIFIED

CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET (Continued)		DATE
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	NAVSTAR GPS BLI 2657	521R
<p>PROGRAM COVERAGE: The Naval Research Advisory Committee (NRAC) GPS Vulnerability Study Panel tasked by OPNAV N6 and ASN(RD&amp;A), assessed the Navy's GPS Vulnerabilities and recommended specific actions to resolve serious issues to ensure the continued availability of GPS information in a high risk hostile jamming environment. As a result, OPNAV N633 (now N611) and N880 (now N78) drafted the Navy Enhanced GPS User Equipment ORD to address operational requirements. These were validated and the ORD was approved on June 7, 2000. With this beginning, OSD directed the first phase of the Navy's overall GPS upgrade program with RDT&amp;E leading to initial OPN procurements of GPS anti-jam antennas beginning in 2002 for ships. RDT&amp;E continues to support platform integration requirements, DT/OT, and Anti Jam (AJ) solutions for submarines. An ACAT III program was established for Sea NAVWAR and this combined with the Navy Enhanced GPS User Equipment ORD have become the basis for the Navy's Sea NAVWAR program.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Procurement and installation anti-jam GPS user equipment and prevention equipment is required to ensure the continued utility of GPS signals from space in a hostile jamming environment. The NAVWAR program will equip selected ships and submarines with anti-jam GPS antennas and other GPS Modernization enhancements to ensure the continued availability of GPS to support surface and subsurface combat operations and provide reliable GPS and other navigation sensor data to ship-board C4ISR, Combat, and Weapons Systems. Failure to procure and install NAVWAR anti-jam antennas on the above platforms would result in the potential loss of critical GPS information resulting in serious impact on platform combat mission effectiveness.</p> <p>FY04 will continue with the procurement of 38 GAS-1 systems with groundplanes and the installation of 17 units. FY05 will continue with the procurement of 27 GAS-1 systems with groundplanes and the installation of 38 units.</p> <p>Installations are being done for each class/ship through the preparation of ship alteration proposals and ship alteration records. Installation Agent: Installation teams and/or overhaul - to be determined for each ship class during execution.</p>		

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CLASSIFICATION

COST ANALYSIS										DATE						
APPROPRIATION ACTIVITY										P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT										NAVSTAR GPS BLI 2657					521R	
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
						FY 2003			FY 2004			FY 2005				
						QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
1R555	Production Support NAVSSI FMP	A						857			448			509		
	Production Support NAVSSI Retrofit	A						297			454			80		
	Production Support NAVSSI Lite	A						285								
	Production Support NAVWAR	A						35			765			804		
1R009	NAVSSI FMP	A				4	538	2,151	6	465	2,790	5	465	2,325		
	NAVSSI - Schools	A				3	250	750	3	250	750					
1R011	NAVSSI - Retrofit	A				4	138	553	9	200	1,800	3	175	525		
1R012	NAVSSI - Land Based Test Upgrades	A							1	500	500					
1R013	NAVWAR	A				17	49	840	38	85	3,230	27	90	2,430		
1R015	NAVSSI Lite	A														
1R777	Installation							5,668			4,782			4,977		
	Install - NAVSSI FMP	A						1,660			2,372			2,195		
	Install - Design Service Agent (NAVSSI FMP)	A						114			443			389		
	Install - NAVSSI Retrofit	A						1,113			725			315		
	Install - Design Service Agent (NAVSSI Retrofit)	A						430			17					
	Install - NAVSSI Lite	A						1,320								
	Install - Design Service Agent (NAVSSI Lite)	A						173								
	Install - NAVSSI Schools	A						90			260					
	Install - NAVWAR	A						672			678			1,558		
	Install - Design Service Agent (NAVWAR)	A						96			287			520		
	TOTAL							11,436			15,519			11,650		
Remarks:																
Note 1: 1R011 Unit cost is the average cost of retrofit hardware on different classes of ships. Starting in FY 02 major combatants, which require more hardware, will be retrofitted, resulting in higher costs per unit.																
Note 2: 1R013 The baseline GAS-1 procurement is a combined Navy OPN/APN buy with unit price being determined based on quantity/year ordered. Unit cost per year also reflects multiple hardware configurations. FY04 begins procurement of 2 Ground Plane Assemblies per ship (several classes) and the Fiber Optic Antenna Link and GAS-1 to GVRC/NAVSSI interface.																

UNCLASSIFIED  
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING										A. DATE		
										February 2004		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						NAVSTAR GPS BLI 2657					521R	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST Delivery	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1R009	NAVSSI	03	Various	WX/RCP	Various	Various	Nov-02	Mar-03	7	538,000	Yes	
		04	Various	WX/RCP	Various	Various	Nov-03	Mar-04	9	465,000	Yes	
		05	Various	WX/RCP	Various	Various	Nov-04	Mar-05	5	465,000	Yes	
1R011	NAVSSI - Retrofit	03	Various	WX/RCP	Various	Various	Nov-02	Mar-03	4	138,000	Yes	
		04	Various	WX/RCP	Various	Various	Nov-03	Mar-04	9	200,000	Yes	
		05	Various	WX/RCP	Various	Various	Nov-04	Mar-05	3	175,000	Yes	
1R013	NAVWAR Hardware	03	Various	FFP	GPS JPO/SSC-SD	Nov-02	Aug-03	Jan-04	17	49,000	Yes	May-03
		04	Various	FFP	GPS JPO/SSC-SD		Mar-04	Oct-04	38	85,000	Yes	
		05	Various	FFP	GPS JPO/SSC-SD		Nov-04	Oct-05	27	90,000	Yes	
D. REMARKS												
1R009 - FY 03 includes 3 school units at a unit cost of \$250K each. FY04 includes 3 schools at a unit cost of \$250K each.												

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MODIFICATION TITLE: NAVSTAR Global Positioning System (GPS) (521R) NAVSSI FMP  
 COST CODE: 1R009

February 2004

MODELS OF SYSTEMS AFFECTED: All models of ships will have NAVSTAR GPS

DESCRIPTION/JUSTIFICATION: The NAVSTAR Global Positioning System (GPS) is a joint Service Program which will provide advance satellite positioning. The ultimate system will consist of a constellation of satellites, control/tracking network, and user equipment installed aboard a variety of airborne, shipborne and land-based platforms. With the advent of Over the Horizon - Targeting (OTH-T), it is imperative that all ships continuously know their geographic position to correlate sensor data and prevent escort ships from becoming unwilling targets. To meet this need, the Navigation Sensor System Interface (NAVSSI) program was initiated. NAVSSI will distribute position, velocity, time and almanac data to onboard command and control and combat systems in real time with GPS as the primary source of navigation data.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	Prior Yrs		FY 03		FY 04		FY 05		FY 06		FY 07		FY 08		FY 09		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	103	28.5	4	2.2	6	2.8	5	2.3	5	2.3	7	3.3	5	2.3	4	1.9			139	45.6
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support		5.4		0.9		0.4		0.5		0.3		0.3		0.3		0.2				8.3
Other (DSA)		1.8		0.1		0.5		0.4		0.4		0.3		0.2		0.1				3.8
Interim Contractor Support																				
Installation of Hardware	101	23.5	4	1.7	6	2.4	6	2.2	6	2.2	7	2.5	5	1.9	4	1.6			139	38.0
PRIOR YR EQUIP	101	23.5																	101	23.5
FY 01 EQUIP																			0	0.0
FY 02 EQUIP			2	0.8															2	0.8
FY 03 EQUIP			2	0.9															4	1.7
FY 04 EQUIP					4	1.6	2	0.7											6	2.3
FY 05 EQUIP							4	1.5	1	0.4									5	1.9
FY 06 EQUIP									5	1.8									5	1.8
FY 07 EQUIP											7	2.5							7	2.5
FY 08 EQUIP													5	1.9					5	1.9
FY 09 EQUIP															4	1.6			4	1.6
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST	23.5			0.0		1.7		2.4		2.2		2.5		1.9		1.6		0.0		38.0
TOTAL PROCUREMENT COST	59.2			0.0		4.9		6.1		5.4		6.4		4.7		3.8		0.0		95.7

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME:

1

PRODUCTION LEAD-TIME:

4

CONTRACT DATES: FY 2003: Nov-02 FY 2004: Nov-03 FY 2005: Nov-04

DELIVERY DATES: FY 2003: Mar-03 FY 2004: Mar-04 FY 2005: Mar-05

INSTALLATION SCHEDULE:	PY	FY 04				FY 05				FY 06			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	105	2	2	1	1	2	2	1	1	1	2	2	1
OUTPUT	105	2	2	1	1	2	2	1	1	1	2	2	1

INSTALLATION SCHEDULE:	FY 07				FY 08				FY 09				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	0	3	2	2	0	2	2	1	0	2	1	1	0	139
OUTPUT	0	3	2	2	0	2	2	1	0	2	1	1	0	139

Notes/Comments

UNCLASSIFIED

MODIFICATION TITLE:  
COST CODE  
MODELS OF SYSTEMS AFFECTED:  
DESCRIPTION/JUSTIFICATION:

NAVSTAR Global Positioning System (GPS) (521R) NAVSSI Retrofit  
1R011

February 2004

All models of ships will have NAVSTAR GPS

The NAVSTAR Global Positioning System (GPS) is a joint Service Program which will provide advance satellite positioning. The ultimate system will consist of a constellation of satellites, control/tracking network, and user equipment installed aboard a variety of airborne, shipborne and land-based platforms.

With the advent of Over the Horizon - Targeting (OTH-T), it is imperative that all ships continuously know their geographic position to correlate sensor data and prevent escort ships from becoming unwilling targets. To meet this need, the Navigation Sensor System Interface (NAVSSI) program was initiated. NAVSSI will distribute position, velocity, time and almanac data to onboard command and control and combat systems in real time with GPS as the primary source of navigation data.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	<u>Prior Yrs</u>		<u>FY 03</u>		<u>FY 04</u>		<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>		<u>FY 08</u>		<u>FY 09</u>		<u>TC</u>		<u>Total</u>	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	48	2.7	4	0.6	9	1.8	3	0.5	5	1.0	2	0.4	7	1.4	10	2.0	11	2.2	99	12.6
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support		2.4		0.3		0.5		0.1		0.2		0.1		0.1		0.4				4.5
Other (DSA)		1.0		0.4		0.0		0.0		0.0		0.0		0.0		0.0				1.4
Interim Contractor Support																				
Installation of Hardware	46	2.6	6	1.1	8	0.7	4	0.3	5	0.4	2	0.2	7	0.5	10	0.8	11	0.9	99	7.5
PRIOR YR EQUIP	46	2.6																	46	2.6
FY 01 EQUIP																			0	0.0
FY 02 EQUIP			2	0.3															2	0.3
FY 03 EQUIP			4	0.8															4	0.8
FY 04 EQUIP					8	0.7	1	0.1											9	0.8
FY 05 EQUIP							3	0.2											3	0.2
FY 06 EQUIP									5	0.4									5	0.4
FY 07 EQUIP											2	0.2							2	0.2
FY 08 EQUIP													7	0.5					7	0.5
FY 09 EQUIP															10	0.8			10	0.8
FY TC EQUIP																	11	0.9	11	0.9
TOTAL INSTALLATION COST	2.6	0.0	0.0	1.1	0.7	0.3	0.4	0.2	0.5	0.8	0.9	0.7	0.5	0.8	0.9	0.9			7.5	
TOTAL PROCUREMENT COST	8.7	0.0	0.0	2.4	3.0	0.9	1.6	0.7	1.9	3.2	3.5	2.6	1.9	3.2	3.5	2.6			26.0	
METHOD OF IMPLEMENTATION:																				

ADMINISTRATIVE LEADTIME: 1

PRODUCTION LEADTIME: 4

CONTRACT DATES: FY 2003: Nov-02 FY 2004: Nov-03 FY 2005: Nov-04

DELIVERY DATES: FY 2003: Mar-03 FY 2004: Mar-04 FY 2005: Mar-05

INSTALLATION SCHEDULE:	PY	<u>FY 04</u>				<u>FY 05</u>				<u>FY 06</u>			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	52	0	3	3	2	1	1	1	1	0	2	2	1
OUTPUT	52	0	3	3	2	1	1	1	1	0	2	2	1

INSTALLATION SCHEDULE:		<u>FY 07</u>				<u>FY 08</u>				<u>FY 09</u>				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		0	1	1	0	0	3	2	2	0	4	3	3	11	99
OUTPUT		0	1	1	0	0	3	2	2	0	4	3	3	11	99

Notes/Comments

UNCLASSIFIED

MODIFICATION TITLE: NAVSTAR Global Positioning System (GPS) (521R) NAVSSI Schools  
 COST CODE: 1R009  
 MODELS OF SYSTEMS AFFECTED: All models of ships will have NAVSTAR GPS  
 DESCRIPTION/JUSTIFICATION: The NAVSTAR Global Positioning System (GPS) is a joint Service Program which will provide advance satellite positioning. The ultimate system will consist of a constellation of satellites, control/tracking network, and user equipment installed aboard a variety of airborne, shipborne and land-based platforms.

February 2004

With the advent of Over the Horizon - Targeting (OTH-T), it is imperative that all ships continuously know their geographic position to correlate sensor data and prevent escort ships from becoming unwilling targets. To meet this need, the Navigation Sensor System Interface (NAVSSI) program was initiated. NAVSSI will distribute position, velocity, time and almanac data to onboard command and control and combat systems in real time with GPS as the primary source of navigation data.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	<u>Prior Yrs</u>		<u>FY 03</u>		<u>FY 04</u>		<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>		<u>FY 08</u>		<u>FY 09</u>		<u>TC</u>		<u>Total</u>	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment			3	0.8	3	0.8													6	1.6
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support																				0.0
Other (DSA)																				0.0
Interim Contractor Support																				
Installation of Hardware	0	0.0	3	0.1	3	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0		6	0.4
PRIOR YR EQUIP																			0	0.0
FY 01 EQUIP																			0	0.0
FY 02 EQUIP																			0	0.0
FY 03 EQUIP			3	0.1															3	0.1
FY 04 EQUIP					3	0.3													3	0.3
FY 05 EQUIP																			0	0.0
FY 06 EQUIP																			0	0.0
FY 07 EQUIP																			0	0.0
FY 08 EQUIP																			0	0.0
FY 09 EQUIP																			0	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST	0.0			0.0		0.1		0.3		0.0		0.0		0.0		0.0		0.0		0.4
TOTAL PROCUREMENT COST	0.0			0.0		0.9		1.1		0.0		0.0		0.0		0.0		0.0		2.0

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME:

1

PRODUCTION LEAD-TIME:

4

CONTRACT DATES: FY 2003: Nov-02 FY 2004: Nov-03 FY 2005:

DELIVERY DATES: FY 2003: Mar-03 FY 2004: Mar-04 FY 2005:

INSTALLATION SCHEDULE:	PY	<u>FY 04</u>				<u>FY 05</u>				<u>FY 06</u>			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	3	0	1	2	0	0	0	0	0	0	0	0	0
OUTPUT	3	0	1	2	0	0	0	0	0	0	0	0	0

INSTALLATION SCHEDULE:	<u>FY 07</u>				<u>FY 08</u>				<u>FY 09</u>				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	6
OUTPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	6

Notes/Comments

UNCLASSIFIED

MODIFICATION TITLE: NAVSTAR Global Positioning System (GPS) (521R) NAVWAR  
 COST CODE 1R013  
 MODELS OF SYSTEMS AFFECTED: LCACs, all M-Class, all CG, DDG, DD, FFGs, all CV/CVN, all L-Class, and all SSNs will be equipped with Anti-Jam Antennas.  
 DESCRIPTION/JUSTIFICATION: Procurement and installation of anti-jam GPS user equipment and prevention equipment is required to ensure the continued utility of GPS signals from space in a hostile jamming environment. The NAVWAR program will equip selected ships and submarines with anti-jam GPS antennas and other GPS Modernization enhancements to ensure the continued availability of GPS to support surface and subsurface combat operations and provide reliable GPS and other navigation sensor data to ship-board C4ISR, Combat, and Weapons Systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:  
 FINANCIAL PLAN: (\$ in millions)

	Prior Yrs		FY 03		FY 04		FY 05		FY 06		FY 07		FY 08		FY 09		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	15	0.7			17	0.8	38	3.2	27	2.4	41	3.8	24	2.3	34	3.2	28	2.7	179	16.2
Equipment Nonrecurring																			403	35.3
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support		0.2		0.1		0.8		0.8		1.0		1.0		1.0		1.1		10.1		15.9
Other (DSA)		0.1		0.1		0.3		0.5		0.5		0.6		0.4		0.4		2.7		5.9
Interim Contractor Support																				
Installation of Hardware			15	0.7	17	0.7	38	1.6	27	1.2	41	1.9	24	1.2	34	1.8	207	11.1	403	20.2
PRIOR YR EQUIP																			0	0.0
FY 01 EQUIP																			0	0.0
FY 02 EQUIP																			15	0.7
FY 03 EQUIP			15	0.7															17	0.7
FY 04 EQUIP					17	0.7													38	1.6
FY 05 EQUIP							38	1.6											27	1.2
FY 06 EQUIP									27	1.2									41	1.9
FY 07 EQUIP											41	1.9							24	1.2
FY 08 EQUIP													24	1.2					34	1.8
FY 09 EQUIP															34	1.8			0	0.0
FY TC EQUIP																	207	11.1	207	11.1
TOTAL INSTALLATION COST	0.0			0.0		0.7		0.7		1.6		1.9		1.2		1.8		11.1		20.2
TOTAL PROCUREMENT COST	1.0			0.0		1.7		5.0		5.3		6.5		5.8		6.0		40.1		77.3

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1

PRODUCTION LEADTIME: 9

CONTRACT DATES: FY 2003: Aug-03 FY 2004: Mar-04 FY 2005: Nov-04  
 DELIVERY DATES: FY 2003: Jan-04 FY 2004: Oct-04 FY 2005: Oct-05

INSTALLATION SCHEDULE:	PY	FY 04				FY 05				FY 06				FY 07				FY 08				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	15	0	5	6	6	9	10	10	9	6	7	7	7										
OUTPUT	15	0	5	6	6	9	10	10	9	6	7	7	7										
INSTALLATION SCHEDULE:		FY 07				FY 08				FY 09				FY 09				FY 09				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		11	10	10	10	6	6	6	6	8	8	9	9									207	403
OUTPUT		11	10	10	10	6	6	6	6	8	8	9	9									207	403

Note: Quantity indicates number of Ground Plane Assemblies procured and installed. Some classes of ships have two Ground Plane Assemblies.

UNCLASSIFIED

MODIFICATION TITLE: NAVSTAR Global Positioning System (GPS) (521R) NAVSSI Lite  
 COST CODE: 1R015  
 MODELS OF SYSTEMS AFFECTED: Ship classes receiving NAVSSI Lite will be: MCM, MHC, ARS, AS FFG, DD, AOE, LPD, LSD  
 DESCRIPTION/JUSTIFICATION: Field a relatively low cost electronic chart-based NAVSSI variant system on those ships which do not require full NAVSSI capabilities.  
 Program was mandated by CNO during Jan 2001 CEB meeting

February 2004

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	Prior Yrs		FY 03		FY 04		FY 05		FY 06		FY 07		FY 08		FY 09		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	38	4.2																	38	4.2
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support		1.0		0.3																1.3
Other (DSA)		0.5		0.2																0.7
Interim Contractor Support																				
Installation of Hardware	18	1.3	7	1.3															25	2.6
PRIOR YR EQUIP																			0	0.0
FY 01 EQUIP	18	1.3																	18	1.3
FY 02 EQUIP			7	1.3															7	1.3
FY 03 EQUIP																			0	0.0
FY 04 EQUIP																			0	0.0
FY 05 EQUIP																			0	0.0
FY 06 EQUIP																			0	0.0
FY 07 EQUIP																			0	0.0
FY 08 EQUIP																			0	0.0
FY 09 EQUIP																			0	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST	1.3	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	
TOTAL PROCUREMENT COST	7.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 1

PRODUCTION LEAD-TIME: 2

CONTRACT DATES: FY 2003: FY 2004: FY 2005:

DELIVERY DATES: FY 2003: FY 2004: FY 2005:

INSTALLATION SCHEDULE:	PY	FY 04				FY 05				FY 06			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	25	0	0	0	0	0	0	0	0	0	0	0	0
OUTPUT	25	0	0	0	0	0	0	0	0	0	0	0	0

INSTALLATION SCHEDULE:	FY 07				FY 08				FY 09				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	25
OUTPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	25

Notes/Comments: Following procurement of some NAVSSI Lite units, OPNAV Sponsor directed no further installations after 25 installations accomplished in light of new Navy direction to scale back to a single electronic charting system (Scalable IBS vice NAVSSI Lite). Remaining assets will be used in Scalable IBS program.

Exhibit P-3a, Individual Modification Program  
 Unclassified  
 Classification

(DOD EXHIBIT P-21)

DATE	February 2004
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<b>APPROPRIATION/BUDGET ACTIVITY</b>
OP, N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE	
NAVSTAR GPS BLI 2657	

SUBHEAD NO.
521R

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
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[illegible]

1R013 NAVWAR is a joint service program, production rates apply to a combination of all the military services procurements.

**P-1 Shopping List-Item No 52 (10 of 11)**

**Exhibit P-21 Production Schedule**  
**Unclassified**  
**Classification**

UNCLASSIFIED  
CLASSIFICATION

PRODUCTION SCHEDULE (Continued)																														DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		